Bruhat Bangalore Mahanagara Palike

Name of Work: Construction of Sheltar and Power Conection for Shredder in Near Bio plant

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
	Civil Work								
1	KSRRB 300-1. **Earthwork excavation** by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete asper specifications.MORTH / Chapter 3(I No-19.1, P No-133)								
	SSM Foundation	4	6.00	0.90	0.75	16.20			
	Basic rate	82.00							
	Loading and Unloading	116.00							
	Area weightage 6%	4.92							
	Total	**202.92**				**16.20**	**Cum**	**202.92**	**3,287.30**
2	KSRB 4-1.3 : Providing and laying in position plain cement concrete of mix 1:4:8 with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregates @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No. 4.3 of PWD SR 2015-16)								
	SSM Foundation	4	6.00	0.75	0.10	1.80			
	Flooring	1	6.00	6.00	0.10	3.60			
	Basic rate	4867.00							
	Area weightage 6%	292.02							
	Total	**5159.02**				**5.40**	**Cum**	**5159.02**	**27,858.71**
3	KSRB 5.2-2: Providing and constructing **granite / trap / basalt size stone masonry** in foundation with cement mortar 1:6, stone hammerd dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per/ specifications.(P.No-23,I No-5.6)								
	SSM Foundation	2	6.00	0.60	0.40	2.88			
		2	5.60	0.60	0.40	2.69			
	SSM Foundation	2	6.00	0.45	0.40	2.16			
		2	5.60	0.45	0.40	2.02			
	Basic rate	4187.00							
	Area weightage 6%	251.22							
	Total	**4438.22**				**9.74**	**Cum**	**4438.22**	**43,246.02**
4	KSRB 5.3-3 : Providing and constructing granite / trap / basalt size stone masonry in basement with cement mortar 1:6, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications. KBS 5.1.13								
	SSM Basement	2	6.00	0.45	0.40	2.16			
		2	5.60	0.45	0.40	2.02			
	Basic rate	5005.00							
	Area weightage 6%	300.30							
	Total	**5305.30**				**4.18**	**Cum**	**5305.30**	**22,154.93**

Administrative Approval

Accorded For Rs. 5.50 Lakhs
Head of A/C P-3158
CER NO : 03 Dt: 6/8/18
E.E. (Project)
6/8

Technical Sanction

Accorded For Rs. 5.50 Lakhs
Head of A/C P-3158
CER NO : 01 Dt: 6/8/18
E.E. (Project)
6/8

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
5	Providing and laying **cement concrete using 20 mm** and down size granite coarse aggregates and fine aggregates of ready mixed concrete Cum (RMC) M 20 for R.C.C works laid in 15 cms thick layers and well compacted vibrating, curing, for raft foundation column footing , mainand secondary beams with all lead and lifts etc., complete (exclusiveof cost of steel and fabrication charges.) (P.No-18,I No-4.48)								
	For Pedestal	11	0.60	0.60	0.50	1.98			
	Flooring	1	6.00	6.00	0.15	5.40			
	Basic rate	5879.00							
	Area weightage 6%	352.74							
	Total	**6231.74**				**7.38**	**Cum**	**6231.74**	**45,990.24**
6	KSRB 4.9.2 : Providing **T.M.T steel reinforcement** for R.C.C work including straightening, cutting, bending, hooking, placing in position,lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 (P.No-17,I No-4.46.3)								
	consider 50kgs/cum for item No.4 only pedestal		1.98	0.50		0.99			
	Basic rate	56701.00							
	Area weightage 6%	3402.06							
	Total	**60103.06**				**0.99**	**Tn**	**60103.06**	**59,502.03**
7	Fabricating, supplying & erecting M.S. angular Truss of span upto 10m. The bottom & top member is provided with 50x50x6mm double equal angles, welded back to back and in between top & bottom line, in areas of mid section is provided with 50x50x6mm equal single angle for vertical and inclined members and at supporting ends 40x40x5mm single angle is provided. All the members are welded together with 6mm gusset plate as per Drawing No.CBS/ SD/K-Mantap/9/MND/97. The entire truss is anchored in RCC column by using 4 Nos. of M.S. anchor bolts at each support, with 10mm thick base plate and shoe plate.The work includes cutting, straightening, placing in position of M.S angle and wleding wherever necessary, and applying one coat of red oxide primer coat to all the members including cost of all materials, labour charges, & hire charges of machineries for cutting, welding, grinding & erection equipments, etc., complete as per specification. (Page No. 40 Item No. 7.30 of CSR 2015-16).								
	For Shredder					**1370.00**			
	Basic rate	117.00							
	Area weightage 6%	7.02							
	Total	**124.02**				**1370.00**	**Kgs**	**124.02**	**169907.40**
8	PROVIDING TRAPEZOIDAL PROFILED SHEET Providing and installing of pre painted Galvolume iron Trapezoidal profiled sheet of approved make 1060 mm width (1000 mm cover width), 28-30 mm crest height with crest distance of 200 mm c/c with 2 ribs at the centre for stiffening. The total coated thickness (TCT) of the sheet will be 0.47 mm +/- 0.02 mm tolerance Zinc-Alu Alloy coating AZ150 gsm as per ASTM 1397/A755-550 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 20-22 microns using self drilling/self tapping screws of 25 mm length, to be fixed over the existing purlins, rafters, channels and trusses.(P.No-300,I No-38.30)								
	For Shredder	1	6.50	6.20		40.30			
		3	6.00	4		72.00			
		1	3.00	4		12.00			
	Window deduction	-2	1.00	1		-2.00			
	Basic rate	770.00							
	Area weightage 6%	46.20							

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
	Total	**816.20**				**122.30**	Sqm	**816.20**	**99,821.26**
9	KSRB 7.9 : Providing and fixing M.S.grill work for windows and ventilators weighing 21kg/sqm using M.S. flats, or M.S. square rods, or combination of M.S. flats and square rods as per approved design, drawing including cutting steel sections and welding the same to required pattern with a coat of red lead primer, cost of materials, fixtures, labour and HOM of machinery complete as per specifications. Specification No. KBS 7.12. (P.No. 32, I.No. 7.9 of PWD SR 2015-16)								
	Ventilator								
		2	1.00		1.00	**2.00**			
	Consider 21kg/Sqm	1	3.00		1.00	**3.00**			
	Basic rate	78.00							
	Area weightage 6%	4.68							
	Total	**82.68**				**105.00**	**Kg**	**82.68**	**8,681.40**
10	KSRB 7.3 : Providing and fixing 1mm thick M.S. sheet garage door with frame and diagonal braces of size 40x40x6 mm angle Iron, 3.15mm thick M.S. Gusset plates at the junctions and corners, with handles, stoppers and locking arrangements etc., including applying a priming coat of red lead paint cost of materials, labour, HOM of machinery complete as per specifications. Double leaf door of size 2.4x2.4m. Specification No. KBS 7.9 / 7.12. (P.No. 31, I.No. 7.3)								
	Door	1	3.00		3.00	**9.00**			
	Basic rate	2332.00							
	Area weightage 6%	139.92							
	Total	**2471.92**				**9.00**	**Sqm**	**2471.92**	**22,247.28**
	Electrical works								
11	Open conduit System: Supplying heavy gauge PVC conduit pipe .....dia confirming to IS 2509 with suitable size bends, plugs in case of RCC ceiling and RCC wall stone structure or rawl plugs in case of brick walls and cement plastering damaged portion using heavy gauge saddles at an interval of 700mm using WF screws.a) 19/25 mm dia 2mm thick chaper -1 P.NO 2 I.NO.1.1.1								
		1	1.00	50.00		**50.00**			
						50.00	**mts**	**54.00**	**2,700.00**
12	Supplying and flush mounting teak wooden box without front plank, made of not less than 15mm thick wood, after due groove cutting, necessary masonry patch work complete. d)8''x6''x3''(203x152x76mm) chaper-1 P.NO.44.I.NO 6.6.1								
		1	2.00			**2.00**			
						2.00	**each**	**72.00**	**144.00**
13	Point wiring using copper wire with switch Supplying and wiring adopting loop system in existing PVC Conduit/casing caping using Copper PVC insulated multi strand 2x1.5Sqmm copper wire with a 6Amps flush type SP control switch shall be fixied on the exisiting plastic sheet /gang box, the pther end of the wires shall be terminated with sufficient loose length in a wood/PVC round block.complete for each outlet. I. Point wiring using class A materials a) Short point upto 3Mtr from tapping point to out let via switch chaper-1 P.NO.5.I.NO 2.1.1								
		1	1.00			**1.00**			
						1.00	**each**	**174.00**	**174.00**
14	Supplying 6A flush/projected type socket and a 6 amps flush/ projected type SP switch either surface/flush mounting in a exisiting gang box or in a 4mm thick plastic sheet and fixing over a flush mounted wooden box and wiring using necessary capacity wires as required. b) 6Amps 3/5 way chapter-1 p.no.15.i.no.3.1.1								
		1	1.00			**1.00**			
						1.00	**each**	**127.00**	**127.00**

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
15	Wiring for lighting/power circuit using one of FLRS PVC insulated 1100v grade, multis and CopperWITH LOW conductor single core cable in open or consealed system of wiring.I Group A Materials.a) 1.5 sqmm chapter no 1 p.no.6.i.no.2.5.1.								
		1	1.00	80.00		80.00			
						80.00	mts	13.00	1,040.00
16	Supplying and fixing pbbc bakelight stright or slant batton holderand wiring within 60v/230volts lamp group A chapter -2 p.no.20.i.no.4.2								
		1	2.00			2.00			
						2.00	each	88.00	176.00
17	Supply patti type tube light fittings of 4'-28 watts fluorescent tube fittings made out of Ms sheet ans stove enameled with low loss open construction copper wound ferromagnetic ballast starter ,locking type brass contact holders mounted on double fold type sheet base fully wired for use on 230 volts AC supply including t5 lamp p.no.20 i.no.4.6								
		1	2.00			2.00			
						2.00	each	699.00	1,398.00
18	FSUPPLING OF 2 PIN/4PIN 18W CFL LAMP p.no.30.i.no.4.38.18								
		1	2.00			2.00			
						2.00	each	120.00	240.00
19	Supply and fixing polished wood board made of not less than 15mm thick plank on both sides with plank made out of not more than 2 pices and fixing the same to the wall using tapered inverted woode plug screws etc., a) 20"x20"2.5" chapter p.no.44.i.no.6.6.6								
		1	2.00			2.00			
						2.00	each	302.00	604.00
20	Supplying and fixing of Procelain fuse channel with cut out on exisiting wooden/panel using necessary nuts, bolts and washers etc., complete.a) 32Amps champter 5 p.no.45.i.no.6.7.2								
		1	6.00			6.00			
						6.00	each	180.00	1,080.00
21	Supply of an load charge over switches 4poles 415v 50Hz A.C supply with AC23A duty a) up to 63amps Groups A chapter 5.p.no.45.i.no.6.11.1								
		1	1.00			1.00			
						1.00	each	4892.00	4,892.00
22	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and C type curve indicator ON/OFF Energy cross 3 with short circuit breaking capacity of 10K and complete wiring as required. e)5-32amps TPN . Group A chapter 5 p.no.47.i.no.6.16.6								
		1	1.00			1.00			
						1.00	each	1936.00	1,936.00
23	Supplying fixing and wiring Electronic 10 to 40 amps Three phase 4wire class -1 Accuracy energy meter Group A chapter 5 p.no.48.i.no.6.33								
		1	1.00			1.00			
						1.00	each	4900.00	4,900.00
24	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipments on the meter board using 40mm dia 2.90 thick Gl pipe 2.5 mtr long buried in a pit ... The pit should be filled with equal proprotion of salt and charcoal 150mm alround the pipe to complete depth. the connection form the pipe to the conduit etc, is to be established through Gl wire of size as oer ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and checknuts etc, the pipe shall have 16 through holes of 12mm dia.chapter 9.p.no.55.i.no.7.1								
		1	2.00			2.00			
						2.00	each	2727.00	5,454.00

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
25	Supplying and running of GI/Copper strips for grounding connections using necessary fixing material as required GI strip 25x3mm chapter 9 p.no.55.i.no 7.3.1								
		1	15.00			15.00			
						15.00	mts	77.00	1,155.00
26	Supplying of LT UG cable having aluminium conductor PVC insulated, sheathed, galvanished, steel wire/steel tap armoured cable with PVC outer sheating 1.1 KV class.I. Class 'A' PVC Cable.d) 4 core 16 sqmm chapter 9.p.no.55.i.no.7.4.4								
		1	25.00			25.00			
						25.00	mts	140.40	3,510.00
27	Labour charges for lying of 1.1 KV class UG cable when supplied agency in existing trench GI pipe / stoneware pipe / on wall /on pole as required. I. In existing trench/duct.a) 6 sqmm to 16 sqmm chapter 9.p.no.61.i.no.7.8.2a								
		1	20.00			20.00			
						20.00	mts	16.20	324.00
28	Supplying exhaust fan of 1440 RPM of 300mm (12") sizewith bracket blades complete for light duty suitable to operate on 230V 50Hz. AC Supply, as per the directions of the Engineer-in-charge of the work.								
		1	1.00			1.00			
						1.00	Nos	1700.00	1,700.00
29	Digging of trench of 0.6 m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc.,complete. (SR KSRB I-7.9.1.1, P-62).a) In soil (ordinary)								
		1	20.00			20.00			
						20.00	mts	117.00	2,340.00
30	Supplying and fixing of class A (medium duty) GI pipe of wall thick ness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV class. a) 40mm chapter 9.p.no.62.i.no.7.12.1								
		2	4.00			8.00			
						8.00	mts	345.00	2,760.00
31	Supplying &fixing L.T.cast iron pot heads suitable for 1.1 KV class UG cable filled with necessary bitumen/insulating compound complete with terminals, clamps, bolts, nuts and washers ect.b) 16 Sqmm chapter 9.p.no.62.i.no.7.13.2								
		1	1.00			1.00			
						1.00	each	280.00	280.00
32	Bescom Deposit								10,000.00
								Total Construction Cost	549630.5
								Sub Total	549630.5
								Machineries ,Miscellaneous and Rounding off	369.4
								GRAND TOTAL	550000.0

Certificate

1. The workspot was inspected and works is found to be necessary.
2. The area comes within the Bruhat Bangalore Mahanagara Palike limits.
3. The rates adopted based on the PWD SR,Bangalore circle for year 2016-2017.and Data Rates

Assistant Engineer
BBMP Bangalore

Asst. Executive Engineer,
BBMP Bangalore

Executive Engineer,
BBMP Bangalore